G PROTEIN-COUPLED RECEPTOR GENE CCR3 AND ANTAGONISTS THEREOF

Abstract of the Disclosure

The present invention relates to isolated and/or recombinant nucleic acids which encode a mammalian (e.g., human) receptor protein designated C-C Chemokine Receptor 3 (CKR-3) or Eos L2, and to proteins or polypeptides, referred to herein as isolated, recombinant mammalian CKR-3 The invention further relates to recombinant receptors. nucleic acid constructs, comprising a nucleic acid which encodes a receptor protein of the present invention or a portion thereof; to host cells comprising such constructs, useful for the production of recombinant CKR-3 receptors or polypeptides; and to antibodies reactive with the receptors, which are useful in research and diagnostic applications.≼

(Also provided are methods of use of the nucleic acids, proteins, and host cells to identify ligands, inhibitors (e.g., antagonists) or promoters (agonists) of receptor function. Administration of a compound which inhibits or promotes receptor function to an individual in need of therapy provides a new approach to selective modulation of leukocyte function, which is useful in a variety of inflammatory and autoimmune diseases, or in the treatment of infections. As a major leukocyte chemokine receptor present in leukocytes such as eosinophils and lymphocytes, the receptor provides a key target for drug screening and design.

ţ Ü L. I m on: 12/0/04

20

5

10

15

25